

Abstract

An optical lens 1 makes three components of visible light and near infrared light in different wavelength regions severally form images at different locations according to their wavelengths. An imaging
5 element 2 has a plurality of pixels, which include pixels having a visible light detection section 6 and pixels having a near infrared light detection section 8. The visible light detection section 6 has three detectors 3, 4, and 5 which detect three components of visible light which form images at locations of different depths
10 in the same pixel according to their wavelengths. The near infrared light detection section 8 has a near infrared light detector 7 which detects near infrared light which forms an image at a location of a depth different from the depths at which the three components of visible light form images. Clear color images with good color
15 reproducibility are obtained by the visible light detection section 6, and at the same time clear luminance information or monochrome images are obtained by the near infrared light detection section 8.